DMR

S/C to Ground Station **ICD Interface Control Document** ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface Phase: В Life Cycle Review PDR/CDR **EOSDIS Example** Radio Frequency interface Control Document Between the EOS-PM-1 Spacecraft and the Spaceflight Tracking and Data Network, 450-RFICD-EOS PM-1/STDN **Bill Guit** For more information contact: william.j.guit@nasa.gov

EDOS-TGT ICD Interface Control Document ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface Phase: B/C PDR/CDR Life Cycle Review **EOSDIS Example** Interface Control Document Between the Earth Observing System (EOS) Data and Operations System (EDOS) and the TDRSS Ground Terminals (TGTs), 428-ICD-EDOS/TGT **Terri Wood** For more information contact: terri.wood-1@nasa.gov

DMRs include Mission-Specific Requirements Documents (MSRDs) and mission requirement documents (e.g., Ground System Requirements Documents (GSRDs), and Mission Operations Requirements Documents (MORDs)). DMRs contain the results of the requirements identification and derivation activities and provide the basis for system design for individual missions.

Phase:

A Life Cycle Review SRR

EOSDIS Example

Aura Mission Specific Requirements Document, 423-10-47

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Detailed Mission Requirements

ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface

Phase: B/C Life Cycle Review: PDR/CDR

EOSDIS Example

EOS PM-1 Spacecraft to EOS Ground System Interface Control Document, 422-11-19-03

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IPA

Inter-Project Agreement

Agreements between ESDIS and projects not managed by ESDIS. Generally, the projects involved agree on an exchange of support services and data. From the interface control viewpoint, these agreements identify the need for an interface and the scope of the interface.

Phase:

Α

Life Cycle Review:

Pre-SRR

EOSDIS Example

Inter-project Agreement (IPA) between the NASA QuikSCAT Scatterometer Project and the Earth Science Data and Information System (ESDIS) Project for Science Data Archive and Distribution Support, 423-10-38

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W/A

Working Agreement

A W/A outlines the working commitments made between the ESDIS Project and another organization for developing, implementing and/or operating portions of the data system.

Phase:

Α

Life Cycle Review

Pre-SRR

EOSDIS Example

Working Agreement between the ESDIS Project and the MOPITT Principal Investigator for Standard Data Production Using the NCAR Science Investigator-lead Processing System (SIPS), 423-10-55

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ICD

EDOS-SIPS

Interface Control Document

ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface

Phase:

B/C

Life Cycle Review

PDR/CDR

EOSDIS Example

Interface Control Document Between the Earth Observing System (EOS) Data and Operations System (EDOS) and the EOS Ground System (EGS) Elements, 428-ICD-EDOS/EGS

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ICD

EDOS-Data Centers
Interface Control Document

ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface

Phase:

B/C

Life Cycle Review

PDR/CDR

EOSDIS Example

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Interface Control Document Between the Earth Observing System (EOS) Data and Operations System (EDOS) and the EOS Ground System (EGS) Elements, 428-ICD-EDOS/EGS

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ICD Networks-SIPS Interface Control Document

ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface

Phase: B/C Life Cycle Review PDR/CDR

EOSDIS Example

Interface Control Document Between the Earth Observing System (EOS) Networks and the Earth Observing System Data and Information System (EOSDIS) Elements, 423-ICD-002

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ICD EMS-Data Providers
Interface Control Document

ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface

Phase: B/C Life Cycle Review PDR/CDR

EOSDIS Example

Interface Control Document between the ESDIS Metrics System (EMS) and the Data Providers, 423-47-01

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ICD Data Center-ECHO
Interface Control Document

ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface

Phase: B/C Life Cycle Review PDR/CDR

EOSDIS Example

Interface Control Document between EOSDIS Core System (ECS) and EOS Clearinghouse (ECHO) for Metadata Inventory and Ordering, 423-45-02

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OA Operations Agreement

Operations Agreements are even lower level, more detailed interface documents that are created to help define the operations use of the interfaces, including such things as addresses, phone numbers, and names of responsible personnel. These documents are not intended for project-level development and control.

Phase:	D	Life Cycle Rev	/iew	ORR				
EOSDIS Example								
Operations Agreement (OA) Between the Goddard Earth Sciences (GES) Data and Information Services Center (DISC) and the Ozone Monitoring Instrument (OMI) Science Investigator-led Processing System (SIPS), 610.2-GDISC-OP-OA.004								
For more information contact:			ary Alcott ary.t.alcott©	<mark>®nasa.gov</mark>				

SIPS-Data Centers ICD Interface Control Document ICDs are used to record design agreements for the interfaces between participating organizations. ICDs provide a means to evaluate and control all mutually interdependent and/or interacting design parameters of the interface Phase: B/C Life Cycle Review PDR/CDR **EOSDIS Example** Interface Control Document between the Goddard Earth Sciences Data and Information Services Center (GES DISC) Simple, Scalable Script-based Science Processor Archive (S4PA) and the Science System Element (SSE) Interface Mechanisms, 423-44-01 Karen Michael For more information contact: karen.a.michael@nasa.gov

IRD		Data Center-SIPS Interface Requirements Document				
IRDs define the requirements for data exchanges across an interface between separately managed systems or subsystems. The requirements statements in IRDs are derived directly from project requirements documents.						
Phase:	Α	Life Cycle Review		MDR		
EOSDIS Example						
Interface Responsibilities for Standard Product Generation Using Science Investigator-led Processing Systems, 423-42-03						
For more information contact:		Dr. H. Ran	napriyan ram.k.ramapriyan@nasa.gov			

ATBD	TBD Algorithm Theoretical Basis Document					
An ATBD describes the physical and mathematical description of the algorithms to be used in the generation of data products. It includes a description of variance and uncertainty estimates and considerations of calibration and validation, exception control, and diagnostics. In some cases, internal and external data product flows are required.						
Phase:	В	Life Cycle Review		PDR		
EOSDIS Example						
EOS/AMSR RAINFALL, Algorithm Theoretical Basis Document Thomas Wilheit, Christian Kummerow, Ralph Ferraro May 1999						
For more information contact:		Karen Michael <u>karen.a.michael@nasa.gov</u>				

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ADURD		Archiving, Distribution and User Services Requirements in EOSDIS				
This document provides generic requirements for data archiving, data distribution and user services for EOSDIS-supported data.						
Phase:	All	Life Cycle Review		All		
EOSDIS Example						
Requirements for Archiving, Distribution and User Services in EOS Data and Information System (EOSDIS), 423-10-69						
For more information contact:		Dr. H. Ramapriyan hampapuram.k.ramapriyan@nasa.gov				

MRT		Mission Readiness Test Plan					
The MRT plan documents the strategy that will be used to verify and ensure that all system components working together meet design specifications and requirements for the mission.							
Phase:	D	Life Cycle I	Review	TRR			
EOSDIS Example							
Earth Observing System (EOS) Aura Mission Readiness Test Plan (MRTP), ESDIS02760							
For more information contact:			Karen Michael karen.a.michael@nasa.gov				

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